

**NWTF Technical Committee Representatives' Report - PA Chapter NWTF
Board of Directors Meeting, January 10, 2010**

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Harvest Management

Preliminary fall 2009 turkey harvest estimates are not available because our Bureau of Automated Services has not yet entered harvest report cards that were mailed due to backlog of work for the new PA Automated Licensing System (PALS).

In cooperation with Bob Eriksen, we updated the white paper from 2003 that described additional spring turkey hunting opportunities. Since 2003 four additional hunting opportunities have been added: a statewide youth-only hunt the Saturday prior to the regular season opening (began 2004); special turkey license (began 2006), the purchase of which permits harvesting a second spring turkey; Mentored Youth Hunt, which includes spring turkey season (began 2006); and season length extended one day to Memorial Day (began 2008). The youth-only season has been very popular accounting for 7 – 8 percent of the total spring harvest (approximately 2,500 – 3,300 turkeys harvested by youth) each year. Some of this harvest may be additional, while other youth may have harvested turkeys during the regular season even without the youth season. The Mentored Youth Hunting Program also has been popular with an average spring gobbler harvest of 3,300 each year, approximately 8 percent of the spring harvest. The Memorial Day closing has accounted for 2 percent of the total statewide harvest, demonstrating that hunters are using the extra day even at the end of the season. Beginning this license year hunters may purchase the special turkey license (enabling them to harvest a second spring turkey) from any license vendor or on-line, until the spring season begins. On average, from 2006 – 2009, almost 4 percent of hunters purchased the license, averaging 8,758 licenses per year, with an average harvest of 1,747, approximately 4 – 5 percent of the spring harvest.

The white paper provides the biological aspects of six main options for additional spring turkey hunting opportunities so that informed decision-making can occur and is being reviewed by the Bureau of Wildlife Management Director. We also are awaiting final results of the gobbler harvest rate study before finalizing recommendations. Copies of the final product will be distributed to the PANWTF Board as well as posted on the agency's website.

PRELIMINARY 2009 Turkey Hunting-Related Shooting Incidents (Reports attached)

Preliminary results for spring 2009 turkey HRSIs have been revised from 6 with one fatal down to 5 non fatal incidents. The fatality was determined to not be hunting related. All 5 were inflicted by others; 3 of which victims were in the line of fire, and 2 where victims were shot for game. These 5 incidents are down from 8 non fatal incidents in 2008, but the same number as spring 2007.

Preliminary results for fall 2009 turkey HRSIs are 3 non fatal incidents, all of whom were shot for game. One incident each in Cambria, Clearfield and Luzerne Counties. This is up from 2 incidents during fall 2008 and one in 2007 which was the lowest number of incidents ever recorded. The previous record low was 2 incidents in both 2003 and 2005 (4 incidents in 2006).

Hen Turkey Survival and Harvest Rate Study

Federal funding (Pittman-Robertson fund) is in place for this four-year (2010 – 2013) research study, in cooperation with the PCFWRC at Penn State (Dr. Diefenbach). Study objectives are to estimate hen wild turkey harvest rates and determine the effect of changing fall season length on harvest rates of hen wild turkeys (see Executive Summary handout). Fall harvest is believed to influence the number of hens that survive to reproduce the following spring. Therefore, changing fall season length is the basis upon which turkey populations are managed and gaining a better

understanding of this relationship will enable us to more confidently manage turkey populations. The two study areas are: 1) WMUs that have shown to be sensitive to 3-week seasons, WMUs 2C, 2E, 4A, 4B & 4D; and 2) WMUs that traditionally have had 3-week seasons but have lower spring harvest densities than the state average, WMUs 2F & 2G.

Equipment has been purchased and trapping begins the week of January 11. We are in the process of submitting a proposal to NWTf for their Grant-in-Aid Research grants to augment our current funding. We look forward to PANWTF's partnership in this study in any manner possible, whether it is financial or volunteer assistance.

Hen turkeys will be captured during January–March and August–September (2010–2013) and fitted with a reward leg band. A sample of the hens trapped during the winter also will be fitted with radio-transmitters. Hens with radio-transmitters will allow us to estimate how many birds survive to the fall hunting season. The harvest of reward-banded and transmittered birds will allow us to estimate the proportion of birds that are harvested — the harvest rate for hen turkeys. After 2 years we propose to change season length using a cross-over design — increase the season length in Study Area 1 by one week (from 2 weeks to 3 weeks) and simultaneously decrease it by the same amount in Study Area 2 (from 3 weeks to 2 weeks). This will allow us to detect differences in harvest rates within study areas as well as any differences in the pattern of change between study areas, while eliminating the effect of confounding factors (e.g., weather conditions, food availability, etc.) that influence harvest rates. Shortening the season by one week in Study Area 2 may be unpopular with some hunters. However, we carefully considered the alternatives and a cross-over design provides the best chance of detecting and measuring the effect of changing fall season length. For management decisions, it is important to know by how much harvest rate changes when we lengthen or shorten the season. If we shorten a season to allow the population to recover, knowing how much harvest rate is reduced will reduce uncertainty in how quickly a population will increase. Because we will obtain harvest rate estimates we will be able to immediately assess the effect of the lengthened and shortened seasons rather than having to rely on three-year trend in population indicators. With this knowledge the agency will be able to better justify turkey management decisions to sportsmen and sportswomen.

Wild Turkey Season Recommendations

The Bureau of Wildlife Management is recommending the following changes to the fall 2010 turkey seasons:

- 1) WMU 2F – To facilitate the hen harvest and survival rate study, the design calls for a 3-week season for 2010 and 2011, and then a 2-week season for 2012 and 2013. This initial increased fall season length also will address the Region request to increase the season in WMU 2F to provide more recreational activities to camp owners in this WMU.
- 2) WMU 4D - To facilitate the hen harvest and survival rate study, the design calls for a decreased season in WMU 4D from 3 weeks to two weeks for 2010 and 2011, and then increase to a 3-week season for 2012 and 2013. This WMU has shown patterns of adverse effects from 3-week seasons and this research study is being conducted to address this issue and determine if changing season length has the desired affect on harvest rates.
- 3) WMU 5A – Research in WMU 5A suggests that closing the fall season does help restore suppressed wild turkey populations. The fall season in WMU 5A has been closed for seven years and has now improved enough to recommend opening the season in 2010. Our population trend surveys suggest that the population has stabilized and can withstand a conservative fall harvest, which is consistent with the management plan to recommend opening a fall turkey season that has been closed when population indices indicate no population growth after 5 years. We recommend a conservative, three-day, mid-week (Tuesday –Thursday) fall turkey season for three years beginning 2010, while continuing to

monitor population indices to determine how well the population can withstand the harvest. If, after the three-year period a more liberal season framework can be supported, then add extra days and/or change the days to include Friday and/or Saturday. Conversely, if the population consistently trends downward then close the fall season after three years.

- 4) WMU 5C and 5D - The fall seasons in these WMUs were shortened to 4 days in 2009 due to concerns of decreasing population trends, and although we usually monitor the change for 3 years before making additional recommendations, population indices suggest these populations have declined substantially since 2001-2005. Although the spring harvest density trend is increasing slightly in WMU 5C, we anticipate spring harvests to begin declining in 2010 due to the declining trend in summer sightings. These WMUs warrant additional protection of closing the fall either-sex turkey season.

The Bureau of Wildlife Management will recommend the following spring 2011 turkey season recommendation: standardize the closing date of the spring turkey season to May 31.

Wild Turkey Spring Harvest Rates and Annual Survival Rates Study

The PCFWRC at Penn State is continuing data analysis and we should be able to provide a final report to NWTF within the next month, as well as submit the research findings to the *Journal of Wildlife Management*. Research results will be used in the regional turkey population model, our structured decision-making system for fall turkey season recommendations, as well as by other state wildlife agencies to assist with their turkey population management.

WMU 5A Wild Turkey Task Force

This task force, formed in 1997, is comprised of staff from PGC, DCNR-BOF, NWTF, PANWTF and Local NWTF Chapters NWTF. During the Task Force annual meeting last October members reviewed status of the WMU 5A turkey population and turkey/habitat management strategies and agreed with the recommendation to open a conservative, three-day, fall turkey season, which is justified via the criteria specified in the PGC's Turkey Management Plan. Grants were unsuccessfully sought for habitat improvements and for rodenticide bait stations on area orchards. Other funding sources will be sought, such as the PANWTF habitat superfund.

2008 Pennsylvania Turkey Hunter Survey

Completion of a final report has been delayed due to the lack of a biometrician. However, we are finalizing a manuscript for the peer-reviewed *Proceedings of the 2010 National Wild Turkey Symposium* and will present the results to the PGC Board in early 2010.

Update on Implementation Schedule of Turkey Management Plan for Pennsylvania, 2006-2015

The third year's implementation of the 10-year wild turkey management plan was again successful. Two strategies have been completed (Appendix 1). Of the remaining 45, 27 strategies are on schedule (21 ongoing, 6 in progress), 4 are delayed until full implementation of the PALS, 4 are in progress behind schedule (beyond personnel time commitments), 4 are future strategies, 4 are low priorities and beyond personnel time commitments and 2 were postponed (one until biometrician is hired and one until completion of gobbler study). Partnerships (monetary and personnel) become more important each year to assist with accomplishing the plan on schedule and we appreciate the support from PANWTF and NWTF. The Plan is important for our programmatic budget approach.